

Remarks/Arguments:

Claims 1-5 and 7-16 stand rejected.

Claims 15 and 16 have now been canceled.

Applicant thanks the Examiner for the opportunity to discuss claim 1 in view of Borg during a telephone interview on November 26, 2008.

Section 102 Rejections:

Claims 1-5 and 7-16 have been rejected as anticipated by Borg. Applicant respectfully request reconsideration of this rejection for the reasons set forth below.

In particular, Borg does not disclose or suggest that "the reference amplifier samples the respective unique reference voltage for each pixel in the row of pixels as each pixel in the row of pixels is sampled by a respective one of the plurality of video amplifiers" as required by claim 1.

This feature is described in the specification, for example, at paragraph [0017] and [0028]. As described therein, each video amplifier is associated with a column of pixels and the one reference circuit is associated with all the rows of pixels and the reference circuit samples the reference pixel, to generate a unique reference voltage, as each pixel in the row of pixels is sampled by the respective video amplifier.

Borg discloses a pixel column amplifier architecture as illustrated in FIG. 1. As shown, the Borg apparatus samples all of the pixels in the line at the same time. It is noted that Fig. 3A, the sampling signals Sp, Sr and Sn are applied to the sampling circuits 240 and 230 in parallel. Thus, all of these samples are obtained at the same time. Borg further describes the signals 250 as being column select signals and as including the column select signal 47. (See col. 7, lines 58-63). Borg further describes the operation of the circuit shown in Figs. 4 and 5, as being used to read out the sampled signal. (See col. 8 lines 32-38). Furthermore, Borg states that the stored reference sample is read out when each of the previously stored row samples is read out. (See col. 8, lines 1-12).

Borg, however, does not suggest the features recited in amended claim 1, namely, that the reference amplifier samples the respective unique reference voltage for each pixel in the row of pixels as each pixel in the row of pixels is sampled by a respective one of the plurality of video amplifiers.

Instead, Borg requires that all of the pixels in the row be sampled at the same time and that the same held reference sample be used for each pixel sample in the row. Applicant notes that Borg, at column 8, lines 10-11 states, "[t]he fourth transistor 330 is enabled when the

column outputs are being read by having its gate coupled to a reference column reset signal 18." This statement requires that the reference pixel in the pixel array be held in a reset state when the previously sampled reference value is read using transistor 330. Thus, the pixel in the pixel array can not be sampled to provide a respective unique reference voltage for each pixel in the row of pixels, as required by claim 1. Thus, Borg can not disclose this feature of claim 1.

Although not the same, independent claims 5, 10, and 13 have been amended to include features similar to amended claim 1. Each one of these independent claims now recites that the reference circuit samples a respective unique reference voltage for each pixel in the row of pixels as each pixel in the row of pixels is sampled by a respective one of the plurality of video amplifiers. These independent claims are, therefore, not subject to rejection in view of the cited reference for the same reasons set forth above for amended claim 1.

Dependent claims 2-4 depend from amended claim 1. Dependent claims 7-9 depend from amended claim 5. Dependent claims 11-12 depend from amended claim 10. Dependent claim 14 depends from amended claim 13. These dependent claims are, therefore, not subject to rejection in view of the cited reference for at least the same reasons set forth above for amended claim 1.

Conclusion

In view of the foregoing amendments and remarks, Applicant requests that the Examiner reconsider and withdraw the rejection of claims 1-5 and 7-14.

Respectfully submitted,


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